

(19) World Intellectual Property Organization  
International Bureau(43) International Publication Date  
9 March 2006 (09.03.2006)

PCT

(10) International Publication Number  
WO 2006/024116 A3(51) International Patent Classification:  
*F41A 17/00* (2006.01)

GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(21) International Application Number:  
PCT/BR2004/000163(22) International Filing Date:  
2 September 2004 (02.09.2004)

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

(25) Filing Language: English

(26) Publication Language: English

(71) Applicants and

(72) Inventors: **DO AMARANTE, José, Carlos, Albano** [BR/BR]; Rua Senador Arthur Bernardes Filho, 329, Barra da Tijuca, 22793-160 Rio de Janeiro, RJ (BR). **VERSOLATO, Roque, Marcelo** [BR/BR]; Av. Divino Salvador, 500 apto. 141, Moema, 04078-110 São Paulo, SP (BR). **PORTO, Luis, Cristovão, de Moraes So-brino** [BR/BR]; Rua Pinheiro Guimarães, 149 casa 116, Botafogo, 22281-080 Rio de Janeiro, RJ (BR).(74) Agent: **LINHARES, João, C.**; Bhering Advogados, Av. Rio Branco 103/11º, Centro, 20040-004 Rio de Janeiro, RJ (BR).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,

## Declaration under Rule 4.17:

— of inventorship (Rule 4.17(iv))

## Published:

— with international search report  
— before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments(88) Date of publication of the international search report:  
3 August 2006

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: OWNER RECOGNITION BY PORTABLE GUNS

(57) Abstract: The invention presented in this work creates the possibility of a portable gun, revolver, pistol, carbine, rifle or hand-machine gun, to recognize its owner, in progressive levels of handling safety. Three levels of handling safety are established based on the evaluation of the grip force or its effect through material deformation or strain gage measurement. The first level of handling safety does not allow persons with grip force below a given limit, to shoot with a gun. The second level of handling safety enables the portable gun to recognize an individual as belonging to a smaller group than the first level. Now, the gun will only recognize for a successful firing an individual whose grip force, measured by one strain gage, fit into a small operational range, established and stored at the moment of acquisition by the owner. The third level of handling safety enables a portable gun to recognize an individual, as belonging to an even smaller group than in the second level. In practice this group is unitary and is composed by the person that grasped the handle to establish the average local grip forces, measured by six strain gages, at the acquisition moment.

A3

WO 2006/024116 A3